

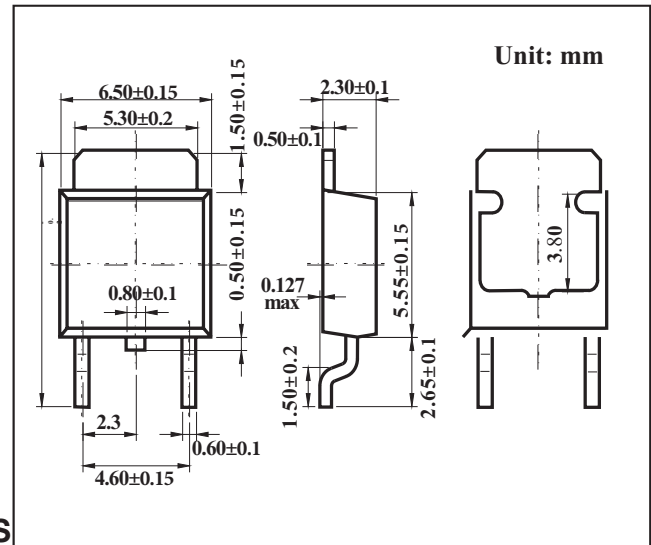
TO-252 Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage VO: 12 V
- Continuous total dissipation
PD: 1.25 W (T_a= 25 °C)

MECHANICAL DATA

- Case: TO-252 Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

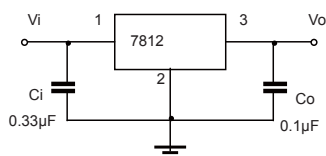
Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Thermal Resistance from Junction to Ambient	R _{θJA}	80	°C/W
Operating Junction Temperature Range	T _{OPR}	-25~+125	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE
(V_i=19V, I_o=500mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V _o	25°C	11.5	12.0	12.5	V
		I _o = 5mA-1A, 14.5V ≤ V _i ≤ 27V	11.4	12.0	12.6	V
Load Regulation	ΔV _o	14.5V ≤ V _i ≤ 30V	25°C	10	240	mV
		16V ≤ V _i ≤ 22V	25°C	3	120	mV
Line Regulation	ΔV _o	I _o =5mA - 1.5A	25°C	12	240	mV
		I _o =250mA - 750mA	25°C	4	120	mV
Quiescent Current	I _q	25°C		4.3	8	mA
Quiescent Current Change	ΔI _q	5.0mA ≤ I _o ≤ 1.0A	-25-125°C		0.5	mA
		14.5V ≤ V _i ≤ 30V	-25-125°C		1.0	mA
Output Voltage Drift	ΔV _o /ΔT	I _o =5mA	-25-125°C	-1		mV/°C
Output Noise Voltage	V _N	f = 10Hz to 100KHz	25°C	75		μV/V _o
Ripple Rejection	RR	f = 120Hz, 15V ≤ V _i ≤ 25V	-25-125°C	55	71	dB
Dropout Voltage	V _d	I _o =1.0A	25°C	2		V
Output Resistance	R _o	f = 1KHz	-25-125°C	18		mΩ
Short Circuit Current	I _{sc}	25°C		350		mA
Peak Current	I _{pk}	25°C		2.2		A

* Pulse test.

TYPICAL APPLICATION



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close possible to the as regulators.

RATINGS AND CHARACTERISTIC CURVES

TYPICAL APPLICATION

